

IN THE CLAIMS:

1-2. (Cancelled)

3. (Currently Amended) A silicon single crystal ingot production method wherein the silicon single crystal ingot production is performed by adjusting a distance between a silicon melt and a heat-shield member installed in a Czochralski-method silicon single crystal production equipment to change a temperature gradient within the crystal in a pulling axis direction and wherein $G_{\text{outer}}/G_{\text{center}}$, which is a ratio of values at a crystal outer edge and at a crystal center of an average value G of the temperature gradient in the crystal, within a temperature range from a silicon melting point to 1350°C , is between 1.10 and 1.50.

4-6. (Cancelled)

7. (Original) A silicon ingot, pulled by a CZ method under conditions satisfying the following (1) and (2):

(1) $1.15 \leq (G1_{\text{edge}}/G1_{\text{center}}) \leq 1.25$

(2) $0.5 < (\text{OSF ring inner diameter/crystal diameter}) < 1.06 \times (G1_{\text{center}} \times G2_{\text{center}})^{-0.2}$

8. (Currently Amended) A silicon wafer, cut from the silicon ingot of claim 7, wherein the inner diameter of the OSF ring is at least 1/2 the inner diameter of the wafer and having an oxide film with a withstand the voltage is 60% or higher at a C mode ratio.

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9. (Original) A method of producing a silicon ingot, characterized in that the silicon ingot is pulled by the CZ method under conditions satisfying the following (1) and (2):

$$(1) 1.15 \leq (G1_{edge}/G1_{center}) \leq 1.25$$

$$(2) 0.5 < (\text{OSF ring inner diameter/crystal diameter}) < 1.06 \times (G1_{center} \times G2_{center})^{-0.2}$$

10. (Currently Amended) A silicon wafer for non-annealing, cut from the silicon ingot of claim 7, wherein the inner diameter of OSF ring is at least 1.2 a wafer inner diameter and having an oxide film with a withstand voltage is 60% or higher at a C mode ratio.

11-12. (Canceled)

13. (Canceled)

14. (Previously Added) The silicon wafer for non-annealing according to claim 10, wherein the silicon ingot has a density of void defects existing on the inside of an oxidation induced stacking fault ring reduced by expanding the inner diameter of the oxidation induced stacking fault.

15. (Canceled)